

Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 19.04.2022

TEST REPORT

CLIENT	:	Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.
AGENCY	:	Sri. M Vinod Kumar, Contractor, Bangalore.
NAME OF THE WORK	:	Construction of culverts in ward no.04 Yelahanka new town sub-Division.
REFERENCE	:	BBMP/EE/YNK D/EPMT-15/W. O/05/2022-23 Date: 12.04.2022.
SAMPLE ID	:	Cement
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 269-2015 RA-2020
1	a) Initial Setting Time	IS-4031 (Part -5) RA-2019	180 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) RA-2019	390 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4) RA-2019	28.00 %	-

Information is furnished by the Agency

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For Civil Experts
ASW
Authorised Signature

Job No.: CECTC/MVK/Ward No.04/2022-23

Date : 19.04.2022

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-2016

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.
Agency : Sri. M Vinod Kumar, Contractor, Bangalore.
Name of Work : Construction of culverts in ward no.04 Yelahanka new town sub Division.
Reference : BBMP/EE/YNK D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.
Date of Testing : 19.04.2022
Material : Sand

Total Wt. of Aggregates **1500**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	52	3.47	3.47	96.5	90-100
2.36	136	9.07	12.53	87.5	75-100
1.18	185	12.33	24.87	75.1	55-90
600 Micron	278	18.53	43.40	56.6	35-59
300 Micron	436	29.07	72.47	27.5	8-30
150 Micron	302	20.13	92.60	7.4	0-10

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For Civil Experts

Author's Signature

Job No.: CECTC/MVK/Ward No.04/2022-23

Date : 19.04.2022

TEST REPORT ON COARSE AGGREGATES
IS 383-2016

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.
Agency : Sri. M Vinod Kumar, Contractor, Bangalore.
Name of Work : Construction of culverts in ward no.04 Yelahanka new town sub Division.
Reference : BBMP/EE/YNK D/EPMT-15/W. O/05/2022-23 Date: 12.04.2022.
Date of Testing : 19.04.2022
Material : 40mm Aggregates

Total Wt. of Aggregates in gms **15000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
80	0	0	0	100	100
40	502	3.35	3.35	96.65	95-100
20	4136	27.57	30.92	69.08	30-70
10	6289	41.93	72.85	27.15	10-35
4.75	3345	22.30	95.15	4.85	0-5

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For Civil Experts

Asw
Signature

Job No.: CECTC/MVK/Ward No.04/2022-23

Date : 19.04.2022

TEST REPORT ON COARSE AGGREGATES
IS 383-2016

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.
Agency : Sri. M Vinod Kumar, Contractor, Bangalore.
Name of Work : Construction of culverts in ward no.04 Yelahanka new town sub Division.
Reference : BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.
Date of Testing : 19.04.2022
Material : 20mm Aggregates

Total Wt. of Aggregates in gms= 5000

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
40	0	0	0	100	100
20	197	3.9	3.9	96.1	90-100
10	2564	51.3	55.2	44.8	25-55
4.75	1789	35.8	91.0	9.0	0-10

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For Civil Experts

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Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 02.05.2022

PRECAST SLAB (CORE) TEST REPORT

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.

Agency : Sri. M Vinod Kumar, Contractor, Bangalore.

Name of Work : Construction of culverts in ward no.04 Yelahanka new town sub Division.

Reference : BBMP/EE/YNKD/EPMT-15/W. O/05/2022-23 Date:12.04.2022.

No. of Sample Tested : 3

Date of Testing : 02.05.2022

Technical Reference : IS 516(Part 4): 2018

Grade of Concrete : M20

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m ³)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm ²)	Corrected Cylinder Compressive Strength (N/mm ²)	Equivalent Cube Compressive Strength (N/mm ²)
1	100.00	105.00	2.120	2570.73	1.05	0.896	149.60	19.05	17.06	21.32
2	100.00	110.00	2.189	2533.75	1.10	0.901	158.90	20.23	18.23	22.79
3	100.00	115.00	2.274	2517.69	1.15	0.907	159.80	20.35	18.44	23.05

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For Civil Experts

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Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 23.05.2022

TEST REPORT ON CONCRETE CUBES

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.

Agency : Sri. M Vinod Kumar, Contractor, Bangalore.

Name of the work : Construction of culverts in ward no.04 Yelahanka new town sub Division.

Reference : BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.

Sample ID : Cement Concrete

Cross Sectional Area : 22500 mm²

Technical Reference : IS: 516(Part-1/Sec-1) 2021

Grade of Concrete : M20

Compressive Strength as on : 28 days

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	25.04.2022	23.05.2022	8.203	451.3	20.06
2	25.04.2022	23.05.2022	8.225	496.8	22.08
3	25.04.2022	23.05.2022	8.236	472.5	21.00

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For Civil Experts
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Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 23.05.2022

TEST REPORT ON CONCRETE CUBES

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.

Agency : Sri. M Vinod Kumar, Contractor, Bangalore.

Name of the work : Construction of culverts in ward no.04 Yelahanka new town sub Division.

Reference : BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.

Sample ID : Cement Concrete

Cross Sectional Area : 22500 mm²

Technical Reference : IS: 516(Part-1/Sec-1) 2021

Grade of Concrete : M20

Compressive Strength as on : 28 days

SLNo.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	25.04.2022	23.05.2022	8.241	502.3	22.32
2	25.04.2022	23.05.2022	8.263	514.9	22.88
3	25.04.2022	23.05.2022	8.289	536.8	23.86

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For Civil Experts

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Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 24.05.2022

TEST REPORT ON CONCRETE CUBES

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.

Agency : Sri. M Vinod Kumar, Contractor, Bangalore.

Name of the work : Construction of culverts in ward no.04 Yelahanka new town sub Division.

Reference : BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.

Sample ID : Cement Concrete

Cross Sectional Area : 22500 mm²

Technical Reference : IS: 516(Part-1/Sec-1):2021

Grade of Concrete : M20

Compressive Strength as on : 28 days

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	26.04.2022	24.05.2022	8.289	502.3	22.32
2	26.04.2022	24.05.2022	8.274	510.3	22.68
3	26.04.2022	24.05.2022	8.296	526.9	23.42

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For Civil Experts

Authorised Signature

Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 24.05.2022

TEST REPORT ON CONCRETE CUBES

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.

Agency : Sri. M Vinod Kumar, Contractor, Bangalore.

Name of the work : Construction of culverts in ward no.04 Yelahanka new town sub Division.

Reference : BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.

Sample ID : Cement Concrete

Cross Sectional Area : 22500 mm²

Technical Reference : IS: 516(Part-1/Sec-1):2021

Grade of Concrete : M20

Compressive Strength as on : 28 days

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	26.04.2022	24.05.2022	8.289	526.9	23.42
2	26.04.2022	24.05.2022	8.274	485.2	21.56
3	26.04.2022	24.05.2022	8.296	496.8	22.08

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Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 06.05.2022

Aggregate Impact Value

IS: 2386 Part IV

Client	Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.
Agency	Sri. M Vinod Kumar, Contractor, Bangalore.
Name of Work	Construction of culverts in ward no.04 Yelahanka new town sub Division.
Reference	BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.
Type of Mix	Wet Mix macadam
Date of Testing	06.05.2022

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	378	380	383	21.91
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	81	83	86	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	297	297	297	
4	Aggregate Impact value = percent fines $100 * (W_2/W_1)\%$	21.43	21.84	22.45	

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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Job No.: CECTC/MVK/Ward No.04/2022-23

Date: 06.05.2022

**DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE
AGGREGATES**

Client	Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.
Agency	Sri. M Vinod Kumar, Contractor, Bangalore.
Name of Work	Construction of culverts in ward no.04 Yelahanka new town sub Division.
Reference	BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.
Technical Reference	IS 2386(Part 1) 1963 (RA 2016)
Type of Mix	Wet Mix Macadam
Date of Testing	06.05.2022

Result : Flakiness Index = 15.63%

Elongation Index = 10.32%

Result : Combined Flakiness & Elongation index

25.95%

Comments:

→ Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 35%

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Date : 06.05.2022

**ATTERBERG LIMITS TEST FOR WMM
MORTH TABLE-400-11**

Client : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, Bangalore.
Agency : Sri. M Vinod Kumar, Contractor, Bangalore.
Name of Work : Construction of culverts in ward no.04 Yelahanka new town sub Division.
Reference : BBMP/EE/YNK.D/EPMT-15/W. O/05/2022-23 Date:12.04.2022.
Date of Testing : 06.05.2022
Material Type : Wet Mix Macadam

As per MORTH Table 400-13

Sl No.	Particulars	Test Results	Standards as per Specifications
1	Liquid Limit	22.40	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

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